



and teacher: Use this cover sheet for mailing or faxing.

ASSIGNMENT BOOKLET 5A

MAT1225 Mathematics 14

Module 5: Section 1 Assignment and Section 2 Assignment

FOR STUDENT USE ONLY

Date Assignment Submitted:

Time Spent on Assignment:

(If label is missing or incorrect)

Student File Number:

Module Number: _____

FOR OFFICE USE ONLY

Assigned

Teacher: _____

Assignment

Grading: _____

Graded by: _____

Date Assignment Received:

Student's Questions and Comments

Apply Module Label Here

Name

Address

Postal Code

Please verify that preprinted label is for
correct course and module.

Teacher's Comments

Teacher

INSTRUCTIONS FOR SUBMITTING THIS DISTANCE LEARNING ASSIGNMENT BOOKLET

When you are registered for distance learning courses, you are expected to regularly submit completed assignments for correction. Try to submit each section of assignments as soon as you complete it. Do not submit more than one Assignment Booklet in one subject at the same time. Before submitting your section assignments or your Assignment Booklet, please check the following:

- Are all the assignments completed? If not, explain why.
- Has your work been reread to ensure accuracy in spelling and details?
- Is the booklet cover filled out and the correct module label attached?

MAILING

1. Postage Regulations

Do **not** enclose letters with your assignments or Assignment Booklets.

Send all letters in a separate envelope.

2. Postage Rates

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FAXING

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2. All faxing costs are the responsibility of the sender.

E-MAILING

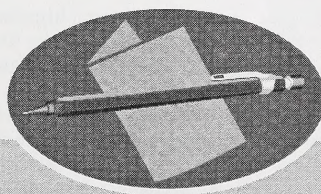
It may be possible to e-mail your completed assignments to the school with which you are registered. Contact your teacher for the appropriate e-mail address.

Mathematics 14

Module 5

Geometry

ASSIGNMENT BOOKLET 5A



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LEARNING

FOR TEACHER'S USE ONLY

Summary

	Total Possible Marks	Your Mark
Section 1 Assignment	25	
Section 2 Assignment	25	
	50	

Teacher's Comments

Mathematics 14

Module 5: Geometry

Assignment Booklet 5A

Section 1 Assignment and Section 2 Assignment

Learning Technologies Branch

ISBN 0-7741-2553-5

The Learning Technologies Branch acknowledges with appreciation the Alberta Distance Learning Centre and Pembina Hills Regional Division No. 7 for their review of this Assignment Booklet.

This document is intended for	
Students	✓
Teachers	✓
Administrators	
Home Instructors	
General Public	
Other	

You may find the following Internet sites useful:



- Alberta Learning, <http://www.learning.gov.ab.ca>
- Learning Technologies Branch, <http://www.learning.gov.ab.ca/lrb>
- Learning Resources Centre, <http://www.lrc.learning.gov.ab.ca>

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ASSIGNMENT BOOKLET 5A
MATHEMATICS 14: MODULE 5
SECTION 1 ASSIGNMENT AND SECTION 2 ASSIGNMENT

Your mark for this module will be determined in part by how well you do your assignments.

This Assignment Booklet is worth 50 marks out of the total 100 marks for the assignments in Module 5. The value of each assignment and each question is stated in the left margin.

Work slowly and carefully. If you have difficulty, go back and review the appropriate lessons.

Be sure to proofread your answers carefully.

25

Section 1 Assignment: Angles

Read all parts of your assignment carefully and record your answers in the appropriate places. Clearly show how you arrived at your answers by showing your work.

3

1. Use your protractor to draw a 37° angle. Use the given ray as the lower arm of the angle. Classify this angle according to its size.

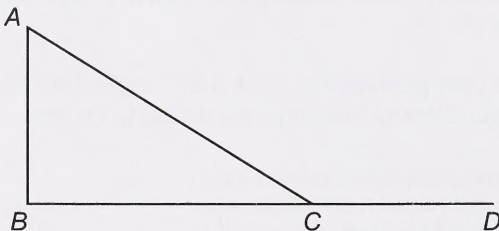


- ③ 2. Use your protractor to draw a 300° angle. Use the given ray as one arm of the angle. Classify this angle according to its size.



Turn to Section 1: Lesson 2 in the Module 5 Student Module Booklet.

3.



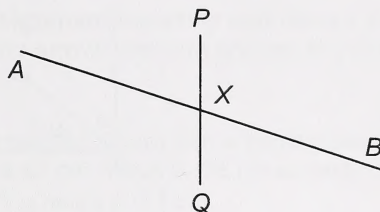
In the diagram, name an example of each angle. Then use your protractor to measure each angle. The first one is done for you as an example.

Description of Angle	Angle	Measure
Example: right angle	$\angle ABC$	90°
a. obtuse angle	_____	_____
b. straight angle	_____	_____

②

②

4. In the diagram, identify an example of each of the following.



①

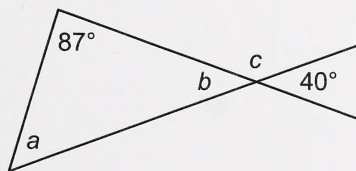
a. an angle opposite $\angle PXB$ _____

①

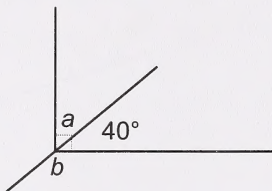
b. an angle adjacent to $\angle QXB$ _____

⑥

5. Calculate the sizes of the angles indicated. Explain the reasons for your calculations.



- ④ 6. Calculate the sizes of the angles indicated. Explain the reasons for your calculations.



Turn to Section 1: Lesson 3 in the Module 5 Student Module Booklet.

- ③ 7. An aircraft is flying due NW. What is its bearing? Draw a diagram showing this bearing.



Turn to Section 1: Conclusion in the Module 5 Student Module Booklet.

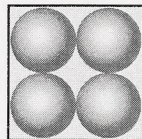
25

Section 2 Assignment: Circles

Read all parts of your assignment carefully and record your answers in the appropriate places. Clearly show how you arrived at your answers by showing your work.

5

1. Four identical balls are packed snugly into a square box. The perimeter of the base of the box is 40 cm. What is the circumference of each ball? Round your answer to the nearest 0.1 cm.



4

2. A bicycle wheel has a radius of 36 cm. If the owner of the bicycle cycles 2 km, how many rotations will the wheel make?

- ④ 3. A trundle wheel marks off 1 yd when it rotates once. What is the radius of the wheel to the nearest 0.1 inch?



Turn to Section 2: Lesson 2 in the Module 5 Student Module Booklet.

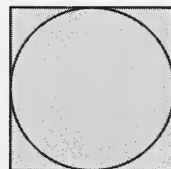
- ④ 4. An archery target is circular with an area of 1 m^2 . What is its diameter to the nearest centimetre?

④

5. What is the area of a circular disk that measures 20 cm in circumference? Round your answer to the nearest square centimetre.

④

6. A circular disk is cut from the following square sheet of metal. If each side of the square is 40 cm in length, what is the area of scrap metal when the circular disk is removed? Round your answer to the nearest square centimetre.



Turn to Section 2: Conclusion in the Module 5 Student Module Booklet.

Student and teacher: Use this cover sheet for mailing or faxing.

ASSIGNMENT BOOKLET 5B

MAT1225 Mathematics 14

Module 5: Section 3 Assignment and Final Module Assignment

FOR STUDENT USE ONLY

Date Assignment Submitted:

Time Spent on Assignment:

(If label is missing or incorrect)

Student File Number:

Module Number: _____

FOR OFFICE USE ONLY

Assigned

Teacher: _____

Assignment

Grading: _____

Graded by: _____

Date Assignment Received:

**Student's Questions
and Comments**

Apply Module Label Here

Name

Address

Postal Code

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Teacher's Comments

Teacher

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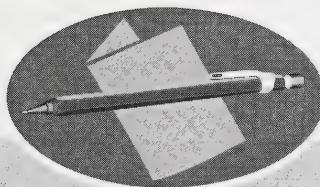
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Mathematics 14

Module 5

Geometry

ASSIGNMENT BOOKLET 5B



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Summary

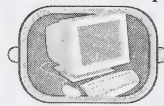
	Total Possible Marks	Your Mark
Section 3 Assignment	20	
Final Module Assignment	30	
	50	

Teacher's Comments

Mathematics 14
Module 5: Geometry
Assignment Booklet 5B
Section 3 Assignment and Final Module Assignment
Learning Technologies Branch
ISBN 0-7741-2554-3

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Home Instructors	
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ASSIGNMENT BOOKLET 5B MATHEMATICS 14: MODULE 5 SECTION 3 ASSIGNMENT AND FINAL MODULE ASSIGNMENT

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20

Section 3 Assignment: Pythagoras's Theorem

Read all parts of your assignment carefully and record your answers in the appropriate places. Clearly show how you arrived at your answers by showing your work.

3

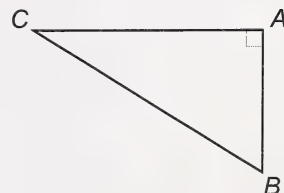
1. Explain how you would estimate $\sqrt{72}$ without a calculator. What is your estimate?



Turn to Section 3: Lesson 2 in the Module 5 Student Module Booklet.

2

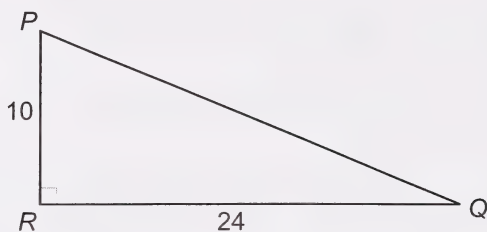
2. Identify the sides of the following triangle as a , b , and c . What is the statement of Pythagoras's Theorem for this triangle?



Turn to Section 3: Lesson 3 in the Module 5 Student Module Booklet.

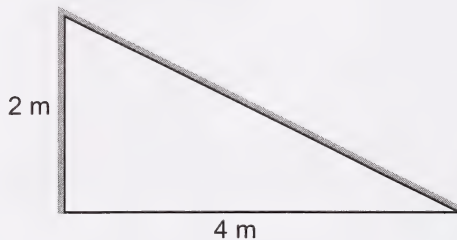
3

3. Calculate the length of PQ .



4

4. A vertical pole broke in a storm at a height of 2 m above the ground.



The top of the pole is resting on the ground 4 m from the base of the pole. What was the original height of the pole, correct to the nearest 0.1 m?

④

5. A person walked 40 m west and then turned and walked north. The person was then 50 m from her original position. How far north did she walk? Draw a diagram as part of your solution.

④

6. A 5-m ladder is leaning against a vertical wall. The foot of the ladder is 1.7 m from the base of the wall. Correct to the nearest 0.1 m, how high up the wall does the ladder reach? Draw a diagram as part of your solution.



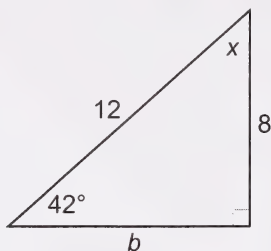
Turn to Section 3: Conclusion in the Module 5 Student Module Booklet.

30

Final Module Assignment

Read all parts of your assignment carefully and record your answers in the appropriate places. Clearly show how you arrived at your answers by showing your work.

1. Use the following diagram to answer each part.



①

- a. One of the triangle's angles is a right angle. How would you classify the other two angles?

②

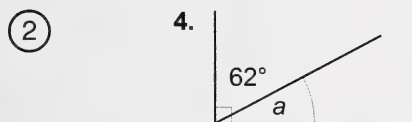
- b. If the smallest angle is 42° , how large is the middle angle? Show how you get this answer.

③

- c. Determine the length of side b , correct to the nearest tenth.

5. 2. A ball has a radius of 3 cm. About how many times would it rotate as it rolls down a 1-m slope?

5. 3. A metal washer has an outside diameter of 2 cm and an inside diameter of 1.5 cm. What area will the washer cover? Round your answer to the nearest hundredth of a square centimetre.



Calculate the size of angle a . Show how you get your answer.

④

5. A commemorative coin is to have an area of 5 cm^2 on each side. What will the diameter of this coin be, correct to the nearest hundredth of a centimetre?

②

6. The diameter of a circle is 60 cm.

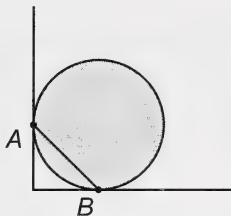
- a. Explain how you would estimate its circumference. What is your estimate?

②

- b. Explain how you would estimate its area. What is your estimate?

4

7.



(Hint: What is this circle's radius?)

A ball with a circumference of 25 cm is resting in the corner of a rectangular drawer. What is the distance between A and B , the points where it rests against the drawer? Round your answer to the nearest tenth of a centimetre.

COURSE SURVEY FOR MATHEMATICS 14

(© 2003)

After you have completed the assignments in this course, please fill out this questionnaire and mail it to the address given on the last page. This course is designed in a new distance learning format, so we are interested in your responses. Your constructive comments will be greatly appreciated, as future course revisions can then incorporate any necessary improvements.

Name _____ Age ☐ under 19 ☐ 19 to 40 ☐ over 40
Address _____ File No. _____
_____ Date _____

Design

1. This course contains a series of Student Module Booklets. Do you like the idea of separate booklets?

2. Have you ever enrolled in a correspondence or distance learning course that arrived as one large volume?
☐ Yes ☐ No If yes, which style do you prefer?

3. The Student Module Booklets contain a variety of self-assessed activities. Did you find it helpful to be able to check your work and have immediate feedback?
☐ Yes ☐ No If yes, explain.

4. Were the questions and directions easy to understand?
☐ Yes ☐ No If no, explain.

5. The course material may contain some enrichment or extra help activities. Did you find these activities beneficial?

☐ Yes ☐ No If no, explain.

6. Did you understand what was expected in the Assignment Booklets?

☐ Yes ☐ No If no, explain.

7. The course materials were designed to be completed by students working independently at a distance. Were you always aware of what you had to do?

☐ Yes ☐ No If no, provide details.

8. This distance learning course may include an assortment of drawings, photographs, and charts.

a. Did you find the visuals in this course helpful?

☐ Yes ☐ No Comment on the lines below.

b. Did you find the variety of visuals in this course motivating?

☐ Yes ☐ No Comment on the lines below.

9. Some activities may have called for the use of an audiocassette, videocassette, or CD. Did you use these forms of media?

☐ Yes ☐ No Comment on the lines below.

10. The Student Module Booklet may have directed you to work with your teacher. How well did you work as a team?

Student's comments: _____

Teacher's comments: _____

Course Content

1. Was enough detailed information provided to help you learn the expected skills and objectives?

☐ Yes ☐ No Comment on the lines below.

2. Did you find the workload reasonable?

☐ Yes ☐ No If no, explain.

3. Did you have any difficulty with the reading level?

☐ Yes ☐ No Please comment.

4. How would you assess your general reading level?

☐ poor reader ☐ average reader ☐ good reader

5. Was the material presented clearly and with sufficient depth?

☐ Yes ☐ No If no, explain.

General

1. What did you like least about the course?

2. What did you like most about the course?

Additional Comments

Only students enrolled with the Alberta Distance Learning Centre need to complete the remaining questions.

1. Did you contact the Alberta Distance Learning Centre for help or information while doing your course?

☐ Yes ☐ No If yes, approximately how many times? _____

Did you find the staff helpful?

☐ Yes ☐ No If no, explain.

2. Were you able to fax any of your assignment response pages?

☐ Yes ☐ No If yes, comment on the value of being able to do this.

3. If you mailed your assignment response pages, how long did it take for their return?

4. Was the feedback you received from your correspondence or distance learning teacher helpful?

☐ Yes ☐ No Please comment.

Thanks for taking the time to complete this questionnaire.
Your feedback is important to us. Please return this
questionnaire to the address on the right.

If you are enrolled at the Alberta Distance Learning Centre
and will be mailing your Assignment Booklets to ADLC,
you may return this questionnaire with the final Assignment
Booklet in the course.

Learning Technologies Branch
Box 4000
Barrhead, Alberta
T7N 1P4

